

Infrared communications scheme for use in an embedded system. According to a preferred embodiment, the invention comprises the use of an infrared communications scheme, according to IrDA protocol, which is utilized to transmit and receive data optically between circuit cards housed within an enclosed, embedded system. Preferably, each respective circuit card is provided with an LED and photodiode to respectively transmit and receive data optically. As such, wire connections are eliminated and allows the systems and methods of the present invention to withstand a greater degree of vibration and shock than that of the prior-art systems and methods. Moreover, the systems and methods of the present invention provide increased reliability and provide greater electrical isolation between modules than prior-art systems and methods.

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